

Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 14, 2003, 09:24:14 ; Search time 15.7075 Seconds
(without alignments) 1247.532 Million cell updates/sec

Title: Perfect score: US-09-836-077-3

Sequence: 1 MTPPPGGRAPASRARVPG. LAASLWLGVLPILMLGLLVH 666

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

1: /cgn2_6/ptodata/2/iaa/5A.COMB.pep:*

2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/2/iaa/6A.COMB.pep:*

4: /cgn2_6/ptodata/2/iaa/6B.COMB.pep:*

5: /cgn2_6/ptodata/2/iaa/PCRS_COMB.pep:*

6: /cgn2_6/ptodata/2/iaa/bacfiles1.pep:*

Pred No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3615	100	0	666	4 US-09-40-410-2
2	3443	95.2	634	4	US-09-041-236-2
3	1345.5	37.2	606	4	US-09-041-216-4
4	1029	28.5	215	4	US-09-040-410-4
5	654.5	18.1	771	1	US-08-121-713D-54
6	654.5	18.1	771	1	US-08-035-208-54
7	654.5	18.1	771	2	US-09-060-692-54
8	654.5	18.1	771	3	US-08-033-391-54
9	654.5	18.1	771	4	US-09-060-610-54
10	654.5	18.1	771	5	PCW-US4-10151A-54
11	566	15.7	775	4	US-09-308-179B-1
12	543	15.0	477	1	US-08-136-922-2
13	449	12.4	730	1	US-08-121-713D-58
14	449	12.4	730	1	US-08-035-268-58
15	449	12.4	730	2	US-09-060-692-58
16	449	12.4	730	3	US-08-033-391-58
17	449	12.4	730	4	US-09-060-610-58
18	449	12.4	730	5	PCW-US4-10151A-58
19	408	11.3	712	1	US-08-083-268-64
20	408	11.3	712	1	US-08-835-268-64
21	408	11.3	712	2	US-09-060-692-64
22	408	11.3	712	3	US-08-083-391-64
23	408	11.3	712	4	US-09-060-610-64
24	408	11.3	712	5	PCW-US4-10151A-64
25	407	11.3	724	1	US-08-121-713D-62
26	407	11.3	724	1	US-08-835-268-62
27	407	11.3	724	2	US-09-060-692-62

ALIGNMENTS

RESULT 1

US-09-240-410-2

; Sequence 2, Application US/09240410

; Patent No. 6197544

GENERAL INFORMATION:

; APPLICANT: MICHALOVICH, DAVID

; TITLE OF INVENTION: NOVEL COMPOUNDS

; NUMBER OF SEQUENCES: 4

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Retnne & Prestia

; STREET: P.O. Box 980

; CITY: Valley Forge

; STATE: PA

; COUNTRY: USA

; ZIP: 19482

COMPUTER READABLE FORM:

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/240,410

; FILING DATE: 27-JAN-1999

CLASSIFICATION:

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: UK APPLICATION NO. TO BE ASSIGNED

; FILING DATE: 20-JAN-1999

; APPLICATION NUMBER: EP APPLICATION NO. 98300694.1

; FILING DATE: 30-JAN-1998

ATTORNEY/AGENT INFORMATION:

; NAME: Prestia, Paul F

; REGISTRATION NUMBER: 23,031

; REFERENCE/DOCKET NUMBER: GP-30039

TELECOMMUNICATION INFORMATION:

; TELEPHONE: 610-407-0700

; TELEFAX: 610-407-0700

; TELEX: 846169

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 666 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

US-09-240-410-2

Query Match 100.0%; score 3615; DB 4; Length 666; Best Local Similarity 100.0%; pred. No. 0; Mismatches 0; Indels 0; Gaps 0;

Matches 666; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MTPPPGGRAPSAARVPGPAPRGLPLRLLLWAAAASAGHRLSGPRFAWKG 60
 1 MTPPPGGRAPSAARVPGPAPRGLPLRLLLWAAAASAGHRLSGPRFAWKG 60
 QY 61 HVGQDRVDFQTEPHVLFHPEGSSSVWVGGRGKVLFDFPEGKMASVRVNTISTKSC 120
 61 HVGQDRVDFQTEPHVLFHPEGSSSVWVGGRGKVLFDFPEGKMASVRVNTISTKSC 120
 Db 121 LDKRCENYITLLEERRSEGLAC37NARHPSCWNLVNGTVPLGEMRGYAPFSDENSLV 180
 121 LDKRCENYITLLEERRSEGLAC37NARHPSCWNLVNGTVPLGEMRGYAPFSDENSLV 180
 QY 241 YFEDENPDKNPAPLNUVSRAQLCRGDOGGESELLSVKWNITLKAMLYCSDATNKF 300
 241 YFEDENPDKNPAPLNUVSRAQLCRGDOGGESELLSVKWNITLKAMLYCSDATNKF 300
 Db 301 NRLQDVFLLPDPSSGWRDTRYVGFSPNPNWSAYCVYSLGDIDKVERTSSLKGHSSLN 360
 301 NRLQDVFLLPDPSSGWRDTRYVGFSPNPNWSAYCVYSLGDIDKVERTSSLKGHSSLN 360
 QY 361 PRPGKCLPDPQOPTETFOADRHPVAVRVEPCKPLKTFPHSKYHYKAVHRMOASH 420
 361 PRPGKCLPDPQOPTETFOADRHPVAVRVEPCKPLKTFPHSKYHYKAVHRMOASH 420
 Db 421 GETPHVLYLTDTDRTHKVEPGQEHSAFNIMELQPERRAALIQTMDAERKLVY 480
 421 GETPHVLYLTDTDRTHKVEPGQEHSAFNIMELQPERRAALIQTMDAERKLVY 480
 Db 481 SOWWYSQVPLDCYVGCGCHGCLMSRDYCGWQGRCISIYSSERSVQIQSINAPHE 540
 481 SOWWYSQVPLDCYVGCGCHGCLMSRDYCGWQGRCISIYSSERSVQIQSINAPHE 540
 Db 541 CPNPKDPAKQKVSALPNSRYSVSCPMESRHYATSWRHKENVQSCPEGHQSPNCILF 600
 541 CPNPKDPAKQKVSALPNSRYSVSCPMESRHYATSWRHKENVQSCPEGHQSPNCILF 600
 QY 601 ENLPAQKQHYCQAEGSYFREAQHWQULPEDGIMAEHLIGHACALAASLWLGVLPLT 660
 601 ENLPAQKQHYCQAEGSYFREAQHWQULPEDGIMAEHLIGHACALAASLWLGVLPLT 660
 QY 661 LGLVYH 666
 661 LGLVYH 666

RESULT 2
 US-09-041-236-2
 Sequence 2, Application US/09041236
 Patent No. 6225205
 GENERAL INFORMATION:
 APPLICANT: Xiomel, Yuling
 TITLE OF INVENTION: Semaphorin k1
 NUMBER OF SEQUENCES: 4
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
 STREET: 75 DENISE DRIVE
 CITY: HILLSBOROUGH
 STATE: CALIFORNIA
 COUNTRY: USA
 ZIP: 94010
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/041,236

RESULT 3
 US-09-041-236-4
 Sequence 4, Application US/09041236
 Patent No. 6225205
 GENERAL INFORMATION:
 APPLICANT: Xiomel, Yuling
 ATTORNEY/AGENT INFORMATION:
 NAME: OSMAN, RICHARD A
 REGISTRATION NUMBER: 36,627
 REFERENCE/DOCKET NUMBER: EXELL98-001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (650) 343-4341
 TELEFAX: (650) 343-4342
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 634 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-09-041-236-2

Query Match 95.2%; Score 3443; DB 4; Length 634;
 Best Local Similarity 100%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;
 Matches 634; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 LLLLWAABAASQAQHLSRGRIFAVWKGHKGQDRVDFGOTEPHTVLFHFRGSSSVWGR 92
 61 GKVYLFDFPGKNAWSVRTVNTGKSCDLCRDCENYITLLEERRSEGLAC37NARHPS 120
 Db 153 WNLVNGTVPLGEMRGYAPSPDENSLVLEGDEVYSTTRKQEVNGKIPFRRIGESEL 212
 Db 121 WNLVNGTVPLGEMRGYAPSPDENSLVLEGDEVYSTTRKQEVNGKIPFRRIGESEL 180
 Db 213 YTSDTVMQNFQIKATIVHODQADKTYFFREDENPDKNPAPLNUVSRAQLCRGDOG 272
 181 YTSDTVMQNFQIKATIVHODQADKTYFFREDENPDKNPAPLNUVSRAQLCRGDOG 240
 QY 273 ESSLSSVKNWFLKAMLYCSDATNKNENRLQDVFLLPPSGOMRDTRYVGFSPNPNWS 332
 241 ESSLSSVKNWFLKAMLYCSDATNKNENRLQDVFLLPPSGOMRDTRYVGFSPNPNWS 300
 QY 333 AVCYSLGDIDKVERTSSKGYHSSLPNPRPGKULPDDOPIPTETFOAQRHPEAQRY 392
 301 AVCYSLGDIDKVERTSSKGYHSSLPNPRPGKULPDDOPIPTETFOAQRHPEAQRY 360
 QY 393 PMGPKTPTPLHFSKHYQKAVHRMOASHGHTEHWYLTDRTGTHKWEFGEQHSAFN 452
 361 PMGPKTPTPLHFSKHYQKAVHRMOASHGHTEHWYLTDRTGTHKWEFGEQHSAFN 420
 QY 453 IMEOPFRRAATOTMSLDAERKLKVYSSQEWYQVPLDCYVGCGCHGCLMSRDPYCG 512
 421 IMEOPFRRAATOTMSLDAERKLKVYSSQEWYQVPLDCYVGCGCHGCLMSRDPYCG 480
 QY 513 WDCRCISYSSSESVLQSNPAPRKHECPNPKDPKAPLQKVSAPNSYVLCSPMERR 572
 Db 481 WDQRCISYSSSESVLQSNPAPRKHECPNPKDPKAPLQKVSAPNSYVLCSPMERR 540
 QY 573 ATYSRHKENVQSCPEGQSPNCILFENLTAQYQGHYCEAOEGSYFREAQHWQULPE 632
 Db 541 ATYSRHKENVQSCPEGQSPNCILFENLTAQYQGHYCEAOEGSYFREAQHWQULPE 600
 QY 633 DGIMAEHLIGHACALAASLWLGVLPLTLLGVLVH 666
 Db 601 DGIMAEHLIGHACALAASLWLGVLPLTLLGVLVH 634

Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps 27; Operating System: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/060,692
 FILING DATE:
 PRIORITY DATE:
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US/08/121,713
 FILING DATE: 13-SEP-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Osman, Richard A.
 REGISTRATION NUMBER: 35,627
 REFERENCE/DOCKET NUMBER: B94-002-1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 343-4341
 TELEFAX: (415) 343-4342
 TELEX:
 INFORMATION FOR SEQ ID NO: 54:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 771 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-09-060-692-54
 Query Match 18.1%; Score 654.5; DB 2; Length 771;
 Best Local Similarity 28.2%; Prod. No. 7.9e-57;
 Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps 27
 Oy 32 RULLIWAAAASAQHRSRG---PRIFAVKGHVDQDRDV---FGOTEPTVLFHEP 82
 Db 6 RIVCLFWGVLLTARANYONGKNNVPRKLKSYKEMLESNNVITFNGLANSSSYHTFLDDEE 65
 Qy 136 RSE-GLLACGTTNARHPSCNLVLNVGTVPLGEM-----RGYAPFSFDENS 178
 Db 124 YNQTHLYACGTGAFHPICT---TYIEIGHHPEDNIFKLENSHENGKSPDPLKLT 177
 Qy 83 GSSSVWGGRKVYLFDEPEGKNAASVRTVNIGSTK-----GSCLDKRDENYTILLER 135
 Db 66 -RSRLYGAOKHIFSFDELVNLNKDFQKIVWMPVSYTRDECKWAGKDLK-ECANFIKVLA 123
 Qy 347 -----RTSSLKGHSSLPNPRPGKC-----LPDQDQIPPTFQVADRHPVQAQR 390
 Db 353 LGPYAHRDGPNNQWVQYQGRVYPRPGTCSKTFGGFDSTKDLPDVDTFARSHPMYNP 412
 Qy 391 VEPMG---PLKTFLFSHKYHQVKAHRHMQASHGETFHVLYLTDRGIIHHKVE-PGEQ 445
 Db 413 VFPNNRPIVKTVD--NYQFTQIVWDVDAEDQ-YVMEFLGTDVGTWKVSIKET 468
 Qy 446 EHSFAFNIM-EQPRERRAAIQTMSLDAERRKLYVSSQWENQVPLDCEVYGGCHGCL 504
 Db 469 WYDLEVLLEMVTFREPTAISAMELSTKQOQLIGSTAGVAQPLHRCDIYGRACAEC 528
 Qy 505 MSRDPYCGMDGRCISY--SSERSVLSQINPAPHEPKCNPKDK---APLOKVSU-A 557
 Db 529 LARDPYCAGDGSACSRVYFPTAKRTRRQDIDRNGDPLTHCSLDHNDHHSPEERIYGV 588
 Qy 558 PNSTYYLSCPMESRHATYWRHKENVEQSCCEPQHSPNCT----LFIENTAQOQYHVF 612
 Db 589 ENSSTFLECPSPKSQRALVWQFORRNEERKEEIRVDDHIRTDOGLLRLSSQQKDSGNYL 648
 Qy 613 CEAOEGSYFREAOHWOLLBDGTMAEHL 640
 Db 649 CHAYEHGFTQTLKVTL--EVIDEHHL 673
 RESULT 7
 US-09-060-692-54
 Sequence 54, Application US/09060692
 ; Patent No. 5935805
 ; GENERAL INFORMATION:
 ; APPLICANT: Goodman, Corey S.
 ; APPLICANT: Kolodkin, Alex L.
 ; APPLICANT: Matthes, David
 ; APPLICANT: Bentley, David R.
 ; APPLICANT: O'Connor, Timothy
 ; TITLE OF INVENTION: The Semaphorin Gene Family
 ; NUMBER OF SEQUENCES: 100
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
 ; STREET: 268 Bush Street, Suite 3200
 ; CITY: San Francisco
 ; STATE: CA
 ; COUNTRY: USA
 ; Z.I.P.: 94104
 COMPUTER READABLE FORM:
 COMPUTER: Floppy disk
 COMPUTER: IBM PC compatible

LENGTH: 771 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-09-060-610-54

Query Match 18.1%; Score 654.5; DB 4; Length 771;
 Best Local Similarity 28.2%; Pred. No. 7.9e-57; Gaps 27;
 Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps. 27;

Qy 32 RLLILWAAAASAOQHURSG---PRIFAVKGHVGODRVD---FGOTEHTVLFHEP 82
 Db 6 RIVCLFWGVLTLTARANYQNGKNNVPRKLSKYKEMLESNNVTFNGLANSSSYHTFLLDEE 65

Qy 83 GSSVWVGGRGVLYLDEPEGNASVNTVNGISTK---GSCLDKRDCENYITLLER 135
 Db 66 -RSRLVYGAQDHIFSFDFLVNIKDFQKTVWPVSYTRIDECKWAGKDLK-ECANFIKVLKA 123

Qy 136 RSE-GLIACGTNARHPSQWNLVNGTVPGLEM-----RGYAPFSPDEN 178
 Db 124 YNQTHLYACGTGAFHPICT---TYEIGHHPEDNFKLENHSFENGGRGKSPYDKLLT 177

Qy 179 LVLFEGDEVYSTIRKQEQNGKIPFRFRIGESELYT---SDIVMNONQFIRATVHQ-DQ 234
 Db 178 ASLIDGELYSTAADMGRDAIFRLGHHPIRKEDSRWLNDPKFISHALISESDN 237

Qy 235 AVDDKIVYFFREDNPDKNPNEAPLNVSQVLAQLRGDGQGESSIONSVKNTELKAMLYCSDA 294
 Db 238 PEKKVYFFERENAIADGEHSGKATHARLQGQKNDGFGHRSI-VNKWTTEFLKARLICSVP 296

Qy 295 ATN---KFNRLQDVLL---PDPGQMDRTYGVF---SNPDWYSAVCVSLGIDKVF 346
 Db 297 GPNGLDTHFDELODQFVLMFKP---KNPVYGVFTTSNFKGSAVCMMSDVRVF 352

Qy 347 -----RTSSLKGHSSLNPRLPKC-----LPDQDQIPTFQVADRHPEVAQR 390
 Db 353 LGPYAHRDGPNQWVPGYRVPYRPTCPSTSFKFGFDSTKLDPDVITFARSHPAMNP 412

Qy 391 VFPFMG---PLKTPFLFHISKYHQVAVHRMOSHGGERPHVLYLTDTGTTIKHVE-PGEQ 445
 Db 413 VFPMMNRPPIVKTDV---NYQFTQIVDVRDADGQ-YDVMPIGTDGVTVLKVSLPKET 468

Qy 446 EHSFAFNIM-ETOPFRRAATQTMSDLARRKLYVSSQWEVSQVPLDICEVGGGHGCL 504
 Db 469 WYDLEEVILEEMVFRERPAITASAMELSTKQDQLYIGTAGVQPLHRCDTIGKACAECC 528

Qy 505 MSRDPYCGWDQCGCISY---SSERSVQSQINAPHEPKCECPNPKPKD---APLOKVS-L-A 557
 Db 529 LARDPYCAGWDGSAACSRVFPPTARRTRRQDINGDPLTHCSDLJHDNHGHGPEERIYGV 588

Qy 558 PNSRYVSLCPMMSRHTATSWRKENVQSCGEQGHQSPNCI---LFTENITAQOQGHF 612
 Db 589 ENSTFLFECSPSPRSQRALVYQWQQRNRERKEEIRVDDHIIKRDQGLLRLSLOQDSGNYL 648

Qy 613 CBAQEGSYFREAOHWOLLPEQDIMAEL 640
 Db 649 CHAVEHGFIOTLKVTL---EVIDTEHL 673

RESULT 10
 PCT-US24-10151A-54

Sequence 54, Application PC/TUS9410151A
 GENERAL INFORMATION:
 APPLICANT: The Regents of the University of California
 TITLE OF INVENTION: The Semaphorin Gene Family
 NUMBER OF SEQUENCES: 66
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: FLIHR HOHBACH TEST ALBRITTON & HERBERT
 STREET: 4 Embarcadero Center, Suite 3400
 CITY: San Francisco
 STATE: CA
 COUNTRY: USA
 ZIP: 94111-4187

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: PCT/US94/10151A
 FILING DATE: 13-SEP-1994
 CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:
 NAME: Osman, Richard A.
 REGISTRATION NUMBER: 36.627
 REFERENCE/DOCKET NUMBER: FP-58750-PC/RAO
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 781-1989
 TELEFAX: (415) 398-3249
 TELEX: 910 277299 FHT UR
 INFORMATION FOR SEQ ID NO: 54:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 771 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 PCT-US94-10151A-54

Query Match 18.1%; Score 654.5; DB 5; Length 771;
 Best Local Similarity 28.2%; Pred. No. 7.9e-57; Gaps 27;
 Matches 194; Conservative 115; Mismatches 280; Indels 99; Gaps. 27;

Qy 32 RLLILWAAAASAOQHURSG---PRIFAVKGHVGODRVD---FGOTEHTVLFHEP 82
 Db 6 RIVCLFWGVLTLTARANYQNGKNNVPRKLSKYKEMLESNNVTFNGLANSSSYHTFLLDEE 65

Qy 83 GSSVWVGGRGVLYLDEPEGNASVNTVNGISTK---GSCLDKRDCENYITLLER 135
 Db 124 YNQTHLYACGTGAFHPICT---TYEIGHHPEDNFKLENHSFENGGRGKSPYDKLLT 177

Qy 179 LVLFEGDEVYSTIRKQEQNGKIPFRFRIGESELYT---SDIVMNONQFIRATVHQ-DQ 234
 Db 178 ASLIDGELYSTAADMGRDAIFRLGHHPIRKEDSRWLNDPKFISHALISESDN 237

Qy 235 AVDKIVYFFREDNPDKNPNEAPLNVSQVLAQLRGDGQGESSIONSVKNTELKAMLYCSDA 294
 Db 238 PEKKVYFFERENAIADGEHSGKATHARLQGQKNDGFGHRSI-VNKWTTEFLKARLICSVP 296

Qy 295 ATN---KFNRLQDVLL---PDPGQMDRTYGVF---SNPDWYSAVCVSLGIDKVF 346
 Db 297 GPNGLDTHFDELODQFVLMFKP---KNPVYGVFTTSNFKGSAVCMMSDVRVF 352

Qy 347 -----RTSSLKGHSSLNPRLPKC-----LPDQDQIPTFQVADRHPEVAQR 390
 Db 353 LGPYAHRDGPNQWVPGYRVPYRPTCPSTSFKFGFDSTKLDPDVITFARSHPAMNP 412

Qy 391 VFPFMG---PLKTPFLFHISKYHQVAVHRMOSHGGERPHVLYLTDTGTTIKHVE-PGEQ 445
 Db 413 VFPMMNRPPIVKTDV---NYQFTQIVDVRDADGQ-YDVMPIGTDGVTVLKVSLPKET 468

Qy 446 EHSFAFNIM-ETOPFRRAATQTMSDLARRKLYVSSQWEVSQVPLDICEVGGGHGCL 504
 Db 469 WYDLEEVILEEMVFRERPAITASAMELSTKQDQLYIGTAGVQPLHRCDTIGKACAECC 528

Qy 505 MSRDPYCGWDQCGCISY---SSERSVQSQINAPHEPKCECPNPKPKD---APLOKVS-L-A 557
 Db 529 LARDPYCAGWDGSAACSRVFPPTARRTRRQDINGDPLTHCSDLJHDNHGHGPEERIYGV 588

Qy 558 PNSRYVSLCPMMSRHTATSWRKENVQSCGEQGHQSPNCI---LFTENITAQOQGHF 612
 Db 589 ENSTFLFECSPSPRSQRALVYQWQQRNRERKEEIRVDDHIIKRDQGLLRLSLOQDSGNYL 648

RESULT 11
US-09-308-179B-1
Sequence 1, Application US/09308179B
Patent No. 6436669
GENERAL INFORMATION:
APPLICANT: INAGAKI, Shinobu
APPLICANT: FURUYAMA, Tatsuo
TITLE OF INVENTION: NOVEL SEMAPHORIN GENES (I)
FILE REFERENCE: 0020-4562P
CURRENT APPLICATION NUMBER: US/09/308-179B
CURRENT FILING DATE: 1999-05-14
PRIOR APPLICATION NUMBER: PCT/JP87/04111
PRIOR FILING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: JAPAN 321068/1996
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO: 1
LENGTH: 775
TYPE: PRT
ORGANISM: MUS sp.
US-09-308-179B-1

Query Match 15.7% Score 566; DB 4; Length 775;
Best Local Similarity 28.4%; Pred. No. 6.9e-8;
Matches 194; Conservative 111; Mismatches 254; Indels 124; Gaps 33;
Qy 33 LLLLWMAAASAQAGH-----RSGPRFAWKGKGVHGVQDRVDFGQI----EPHT 76
Db 8 LTLILW-----GHLLEWTPGHSANPSYPRLKRHKELLENRTSIFQSPGLFLDLT 60

Qy 77 VLFHEGSSSWVGCKVWLFDPPGKMSAVRTWIGST-----KGSCLKRDCE 127
Db 61 MLLDDE-YOERLFVGGGRDLYVSLNL-ERVSQGYRELYWPSTAVKECIMKGK -DANECA 116

Qy 128 NYITLLEERRSE-GLLACGTGWARHPSQWNLVNG-TVVPGLM-----RGYAPSPDE 176
Db 117 NYIRVLLHHNNTHLTCATGAFDPHCAFIRVGHSEPRFULESRSERGRGRCPDPNS 176

Qy 177 SFVSTLVGNELFGVYSDYNGORDSAFTRSMGKLHTRTE -- HIDERLLKEPKFVGSMYI 233

Qy 231 HQDQAYDD KIVYFREDNPKNPEAPLNSRVAQLCRGOGGESSLSVKWNFLKAM 289
Db 234 PDNEFRDNNMFYFETEKAEEAENVAHTYTRVGRICVNDMGGQRL-VNKWTFKLRL 292

Qy 290 VCSDAATN--KFNFLQDYFLP--DPSGQWRDTRVYGVF--SNPWNSAVCVYSLGD 341
Db 293 VCSVFGMNG-ITDYEFLLEDYFLPFRDP--KNUVIFGLNTISNIFRHAVCVYHMS 348

Qy 342 IDKVR--TSLIKG--YHSSL---PNPRPGKICP-----DQQPPTETFQVADRH 384
Db 349 IREAFNGPYAHKEGPYHWSLYEGKVYPGRGASKVNGKGYITKDYPDDATRFARMH 408

Qy 385 PEVARVERPVGPKPLPF--HSKHYQKAVVRHQASKGETHFLYLTDRTGTHKVE 441
Db 409 PLMYQPIKPVH-KKRPILVKDQKYLRLQAVDRAEADQG-YDVLFIGPDTGTVLKVT 465

Qy 442 PGEQHHSFAFNIM--EIQPFRRAATQTMISLDAERKLYVSSQWEVSQVPLDLCVYGG 499
Db 466 IYQETEEMMVEVILFELQIKDRPAMISMISKQQLIGSASAQAVFHRHCDMGS 525

Qy 500 CHGCLMSRSDYCGWQDGRCSIY---SSERSVQOSINPAEPKECPNPK--PKAPLQ 552
Db 526 CADCCLARDPVCWNGDQISCSRYYPTGAHAKRFRQDVRHGNALQCFGQOFVQDALDRT 585

Qy 553 KVSIA--PNSRYLSCPMSFRHAYSW-----RHKENVEQ----SCERGHSOPNCI 597

RESULT 12
US-08-136-922-2
Sequence 2, Application US/08136922
Patent No. 5416197
GENERAL INFORMATION:
APPLICANT: Paper, Jonathon A.
APPLICANT: Luo, Yuling
TITLE OF INVENTION: Compositions which Regulate Neural
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &
ADDRESSEE: NO. 541619715
STREET: One Liberty Place
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19103

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/136, 922
APPLICATION NUMBER: 33-229
FILING DATE:
CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:
NAME: DeLuca, Mark
REGISTRATION NUMBER: 33-229
REFERENCE/DOCKET NUMBER: UPN-1428
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
TELEFAX: 215-568-3439

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 477 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-136-922-2

Query Match 15.0% Score 543; DB 1; Length 477;
Best Local Similarity 31.2%; Pred. No. 6.3e-46;
Matches 144; Conservative 74; Mismatches 187; Indels 56; Gaps 17;

Qy 230 VHQDQYDDKTYFPEEDNPKNPEAPLNSRVAQLCRGOGGESSLSVKWNFLKAM 289
Db 1 LEHDNEFDDKVYFFERENADGEHESKATHARIGOLICKNDFGGHRSL-VNKWTFKLRL 59

Qy 290 VCSDAATN--KFNFLQDYFLP--DPSGQWRDTRVYGVF--SNPWNSAVCVYSLGD 341
Db 60 ICSVPGPNGIDTHFDELQDFLMLNPKD--KNUVYGVFTISSNIFRKGSAVCIMSM 115

Qy 342 IDKVF-----RPLSLKGYHSSUPNPRPGK-----LDPQQPPTETFQVADRH 385
Db 116 VRRVFLGPYAHRDGPYQWYQGRVYPRGTCPSKSTFGFDSTKLDPLPDVITFARSH 175

Qy 386 EVAQREPMG---PLKTPFHSKHYQKAVVRHQASKGETHFLYLTDRTGTHKVE 441
Db 176 AMYNPVPMPNRPVTKTDV--NYQFTQIWDYRDAEDQ-YDMEFIGDVTGTVLKVS 231

Qy 442 PGEQHHSFAFNIM--EIQPFRRAATQTMISLDAERKLYVSSQWEVSQVPLDLCVYGG 499
Db 232 IPKETWYDLEEVLFULEVREPTAISAMLSKQOOLIGTGSTAGVQPLDHRCDIYGA 291

QY 500 CHGCLMSRDPYCGWDQGRCSITY--SSERSVLSQINPAEPHKKECPNPKPDK---APLOK 553
 Db 292 CAECLARDPBYCANDGSACSRVFPKAKRKRQIRNGNPLTCSDLHIDNHGHSPER 351
 QY 554 VSL-APNSRVYLCPCMESRHATYSWRHKEVQECPGHSQPCN----LFTINLTACQ 607
 Db 352 IIGYVENSSTFLCSPKSQRALLVWQFORRNERKEEIRVDDHIRTDOGLLRLSQKD 411
 QY 608 YGHYCEAQEGSYFREAQHQLLPEDGIMAEHL----GH 643
 Db 412 SGNYLICHAVHGFQTLKVTLEVIDNEHLEELAHKDDQH 452
 RESULT 13
 US-08-121-713D-58
 Sequence 58, Application US/08121713D
 Agent No. 5639856
 GENERAL INFORMATION:
 APPLICANT: Goodman, Corey S.
 APPLICANT: Kolodkin, Alex L.
 APPLICANT: Matthes, David
 APPLICANT: Bentley, David R.
 APPLICANT: O'Connor, Timothy
 TITLE OF INVENTION: The Semaphorin Gene Family
 NUMBER OF SEQUENCES: 100
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
 STREET: 268 Bush Street, Suite 3200
 CITY: San Francisco
 STATE: CA
 COUNTRY: USA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/121,713D
 FILING DATE: 13-SEP-1993
 CLASSIFICATION: 514
 ATTORNEY/AGENT INFORMATION:
 NAME: Osman, Richard A.
 REGISTRATION NUMBER: 36,627
 REFERENCE/DOCKET NUMBER: B94-002-1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415)343-4341
 TELEFAX: (415) 343-4342
 TELEX:
 INFORMATION FOR SEQ ID NO: 58:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 730 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 ; US-08-121-713D-58
 Query Match 12.4%; Score 449; DB 1; Length 730;
 Best Local Similarity 27.6%; Pred. No. 4.1e-36; Gaps 28;
 Matches 157; Conservative 89; Mismatches 229; Indels 94; Gaps 28;
 QY 36 LIVVAAASASQAGHLSGRSPRTEAWKCHVQGDRYD-FGQTEPHVLFH--BPGSSSWWGG 92
 Db 11 LLWVLAHAAWVNDVSPKMYV--QFGBEVRQFLGNESHKDHFKLLEKDHNLSLUGAR 66
 QY 93 GKVY--LFFPEPKRASVTVNISTKGCL---DKRQENITLLE-RSECLLACG 144
 Db 67 NIVVNLISRLDTEFQEIRIIEWHSGSAHRECYLKOKSEDQCNVYIRLAKIDDRVLLC 126
 QY 145 TNARHPSC-WNLVNGTUVPLGEM--RGVAPPSPDENSLVLFEDDEVYSTIRKBYNGKI 200
 Db 127 TNAVKPLCRHIALKQDGIVVKEVKEYSGRLCPFDHDNSIRAYSEQQLYSA-TVADFSGD 185
 RESULT 14
 US-08-835-268-58
 Sequence 58, Application US/08835268
 Patent No. 5807826
 GENERAL INFORMATION:
 APPLICANT: Goodman, Corey S.
 APPLICANT: Kolodkin, Alex L.
 APPLICANT: Matthes, David
 APPLICANT: Bentley, David R.
 APPLICANT: O'Connor, Timothy
 TITLE OF INVENTION: The Semaphorin Gene Family
 NUMBER OF SEQUENCES: 100
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
 STREET: 268 Bush Street, Suite 3200
 CITY: San Francisco
 STATE: CA
 COUNTRY: USA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/835, 268
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US/08/121, 713
 FILING DATE: 13-SEP-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Osman, Richard A.
 REGISTRATION NUMBER: 36,627
 REFERENCE/DOCKET NUMBER: B94-002-1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415)343-4341
 TELEFAX: (415) 343-4342
 INFORMATION FOR SEQ ID NO: 58:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 730 amino acids
 TYPE: amino acid

